

FRONT PROJECTION SCREEN AND SYSTEMS USING SAME

ABSTRACT OF THE DISCLOSURE

A front projection screen comprises a transparent substrate and a plurality of opaque reflective regions. The light reflective regions could comprise reflective spheres, indentations in the transparent substrate having a reflective coating on a surface thereof and a non-reflective material filling said indentation, portions of reflective spheres, reflective irregularly shaped particles, a pattern of lines, dots, graphic shapes, or granules, three-dimensional forms, reflective grooves, Fresnel patterns, extensions from the surface of the substrate, or reflective ridges formed on a surface of said transparent substrate.

The light reflective regions could be formed from particles selected from the group consisting of a fine gradation of ground rock, crystal, metal filings, sand, powder, or specially produced three dimensional forms. The screen could be used in an image projection system employing a projector and in a communications system employing a projector, camera, and transmission equipment.